

Doc Code: AP.PRE.REQ

PTO/SB/33 (07-05)

Approved for use through xx/xx/200x. OMB 0651-00xx  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Docket Number (Optional)

138561

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]

on January 16, 2007

Signature

Typed or printed name

Marilyn Alexander

Application Number

10/662,945

Filed

September 15, 2003

First Named Inventor

Thomas F. PAPALLO

Art Unit

2125

Examiner

Zoila E. Cabrera

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.  
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96)

☒ attorney or agent of record.  
Registration number 31,019

☐ attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 \_\_\_\_\_



Signature

Paul D. Greeley

Typed or printed name

(203) 327 - 4500

Telephone number

January 16, 2007

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☒ Total of 11 forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): Papallo et al.  
Serial No.: 10/662,945  
For: CIRCUIT PROTECTION SYSTEM  
Filed: September 15, 2003  
Examiner: Zoila E. Cabrera  
Art Unit: 2125  
Confirmation No.: 2025  
Customer No.: 27,623

Attorney Docket No.: 138561

**Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450**

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Dear Sir:

In response to the Final Office Action dated July 14, 2006 and the Advisory Action dated September 28, 2006, the period for response having been extended three months up to and including January 16, 2007, Applicants respectfully file herewith a Notice of Appeal and request review of the present application before filing an appeal brief.

**Related Appeals**

The undersigned attorney is not aware of any related patent applications or patents involved in any appeal or interference proceeding.

**Status of the Claims**

Independent claims 1, 14, 29, 39, 51, and 62, as well as dependent claims 2-13, 16, 19-28, 30-38, 40-50, 52-61, and 63-74 are pending in the present application.

Independent claims 1, 29, 39, 51, and 62, as well as dependent claims 3-4, 6-11, 30-37, 40-46, 49, 52-58, 60, 63-69, and 71 were finally rejected under 35 U.S.C. §102(b) over U.S. Patent No. 5,568,399 to Sumic (Sumic). Dependent claims 12-13, 47-48, and 72-73 were rejected under 35 U.S.C. §103 over Sumic in view of U.S. Publication No. 20050251296 to Nelson et al. (Nelson). Dependent claims 27-28 were rejected under 35 U.S.C. §103 over Sumic in view of U.S. Patent No. 6,728,205 to Finn (Finn) in further view of Nelson.

**Clear Errors for Review**

The Final Office Action and the Advisory Action assert that Sumic discloses adjusting a zone protection function. Applicants submit this assertion is clearly erroneous. Rather, Applicants submit that Sumic merely discloses maintaining and updating the order in which the protective devices operate. However, Applicants submit that adjusting the order or schema as in Sumic simply does not disclose or suggest adjusting the zone protective function itself, which is an adjustment of how the protective devices operate, as claimed by the present application.

Independent claim 1 recites, in part, the step of “adjusting a zone protective function for said zone of protection based at least in part upon changes to said first topology (emphasis added)”.

The present application discloses that: “The dynamic operation of system 26, and its capability of adjusting the zone protection functions, including, but not limited to, the algorithms and/or the coefficients associated with the algorithms, accounts for changes in the topology within the zone of protection, as well as throughout the entire circuit. See paragraph [0088]

Thus, claim 1 adjusts the zone protective function itself based at least in part upon changes to the first topology.

In contrast, Sumic discloses a digraph 64, referring to FIG. 4A, illustrating protective devices (P1, P2, P3, et cetera). The resulting protective device schema relates to the order in which the protective devices would operate in case of a fault, and the associated backup protective device upstream from each operated protective device that may successively operate to minimize loss of overall power distribution grid integrity. Referring to FIG. 4B, Sumic discloses a data structure 66 representing the protective device schema of digraph 64 utilized in the outage determination program. In other words, by upstream tracing using data structure 66, it can be determined that the backup for protective device P7 is protective device P6, whose backup is in turn protective device P3, and so on. The protective device schema data structure 66 is dynamically maintained and updated following any changes to the distribution system functional topology during the operation of the power distribution system. See col. 6, lines 31-61.

Clearly, Sumic merely dynamically maintains and updates the schema (i.e., the order of the protection devices in the system). However, Sumic simply fails to disclose or suggest adjusting the zone protective function itself based at least in part upon changes to said first topology as recited by claim 1.

The Office Action fails to assert that Nelson or Finn disclose or suggest adjusting the zone protective function as recited by claim 1.

Therefore, independent claim 1, as well as claims 2-13 that depend therefrom, are believed to be in condition for allowance over Sumic alone or in combination with Nelson. Reconsideration and withdrawal of the rejection to claims 1-13 are respectfully requested.

Independent claim 14 recites, in part, the step of “adjusting said zone protective function based at least in part upon changes to said second topology”. Independent claim 29 is directed to a protection system that requires, in part, a control processing unit that “adjusts a zone protective function for said zone of protection based at least in part upon changes to said topology”. Similarly, independent claim 39 is also directed to a protection system that requires, in part, a control processing unit “adjusting a zone protective function for the zone of protection based at least in part upon said topology”. Independent claims 51 and 62 are each directed to a power distribution system that requires a control processing unit. In claim 51 the control processing unit “adjusts a zone protective function for said zone of protection based at least in part upon changes to said topology”, while in claim 62 the control processing unit “adjusts a zone protective function for said zone of protection based at least in part upon said topology”.

As discussed in detail above with respect to claim 1, Sumic merely dynamically maintains and updates the schema (i.e., the order of the protection devices in the system) and therefore fails to disclose or suggest the control processing unit that adjust a zone protective function in the manner recited by independent claims 14, 29, 39, 51, or 62.

The Office Action fails to assert that Nelson or Finn disclose or suggest the control processing unit that adjust a zone protective function in the manner recited by independent claims 29, 39, 51, or 62.

Finn discloses a dynamic routing system for a signal between a source and a destination where multiple trees connected to various nodes are determined as contingency paths as shown in FIG. 2. Thus, Finn merely discloses a dynamic routing system and therefore also fails to disclose or suggest the step of adjusting the zone protective function in the manner recited by independent claim 14.

Therefore, independent claims 14, 29, 39, 51, and 62, as well as claims 16, 19-28, 30-38, 40-50, 52-61, and 63-74 that depend therefrom, are believed to be in condition for allowance over Sumic alone or in combination with Nelson and/or Finn. Reconsideration and withdrawal of the rejection to claims 14, 16, and 19-74 are respectfully requested.

In view of the above, it is respectfully submitted that the final rejection is clearly erroneous and, as such, the present application is in condition for allowance. Reconsideration and withdrawal of the rejection to the claims and passage of the present application to issuance are respectfully requested. Such action is solicited.

Respectfully submitted,



January 16, 2007

---

Paul D. Greeley  
Registration No. 31,019  
Attorney for Applicant(s)  
Ohlandt, Greeley, Ruggiero & Perle, L.L.P.  
One Landmark Square, 10<sup>th</sup> floor  
Stamford, CT 06901-2682  
Tel: (203) 327-4500  
Fax: (203) 327-6401